

## [54] PERSONAL HEALTH MONITOR

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## [57] ABSTRACT

A personal health monitor includes sensors for measuring patient weight, temperature, blood pressure, and ECG waveform. The monitor is coupled to a central unit via modems and includes a computer which is programmed to prompt a patient to take prescribed medication at prescribed times, to use the sensors to measure prescribed health parameters, and to supply answers to selected questions. Medication compliance information, test results, and patient answers are compiled in a composite log which is automatically transmitted to the central unit. The computer is also programmed automatically to disconnect the monitor from an alternating current power source and to rely on internal battery power during certain periods of patient-monitor interaction, such as during use of the ECG module. In this way, danger to the patient and complexity of the ECG module are minimized. The computer is also programmed to compare measured test information with predetermined expected values, and in the event of a discrepancy, to collect additional information from the patient to assist trained personnel at the central unit in interpreting the composite log. The computer is also programmed to alert the central unit promptly in the event one or more measured parameters falls outside of a prescribed normal range. The normal range for a given parameter is made to vary in accordance with the measured value of one or more other parameters in order to reduce the incidence of false alarms.

30 Claims, 16 Drawing Sheets

